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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,722	07/03/2003	Naimul Karim	55093US009	4983
32692	7590	08/19/2004	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			SZEKELY, PETER A	
			ART UNIT	PAPER NUMBER

1714

DATE MAILED: 08/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/613,722	<b>Applicant(s)</b> KARIM ET AL.	
	<b>Examiner</b> Peter Szekely	<b>Art Unit</b> 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/13/04</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 15-18 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The intended use does not further limit the composition of claim 1.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 7, 14, 34 and 46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. The claims contain improper Markush language. Proper Markush language is "selected from the group consisting of", whenever the last conjunction is "and".

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-48 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent No. 6,624,211. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent are the species for the genus, which consist of the claims of the instant application.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-8, 10-12, 17-35 and 37-41 are rejected under 35 U.S.C. 102(a or b or e) as being anticipated by Bowen et al 3,3,740,850, Erickson et al. 3,928,280, Argentar 4,243,763, Antonucci 4,536,523, Bowen 5,320,886, Eichmiller 5,525,647, Okada et al. 5,698,611, Kawashima et al. 5,908,879, Harada et al. 6,191,191, Nippon Oil & Fats EP 0 176 777, University of California WO 95/30480 or Kuraray Co. Ltd. JP-9-77623.

9. Bowen et al. ('850) disclose the monomers in the Abstract, peroxide initiators in the paragraph overlapping columns 5 and 6, fillers in column 6, lines 14-27, aromatic amines in column 4, lines 29-49 a and polymerizable tertiary aromatic amine in column 2, lines 7-40, especially lines 38-40. See also claim 1, lines 40-45. Erickson et al. recite peroxide, amines, fillers, monomers and kits in column 1, lines 45-65. Argentar

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lists peroxides, amines and monomers in the Abstract and fillers in column 9, lines 53-60. Antonucci displays monomers, kits and mercaptans in claim 1, blends of peroxides in claim 2 and fillers in claim 3. Bowen ('886) reveals monomers in the Abstract, kit in column 5, lines 66-67, polymerizable amine in column 3, lines 62-64, blends of amines, peroxide and camphorquinone in column 12, lines 4-38. Eichmiller divulges monomers, peroxides, amines and camphorquinone in column 4, lines 14-31 and kits in claim 7. Okada et al. present monomer, peroxide and amines and more than one tertiary amine in claim 1. Kawashima et al. describe initiators, monomers and fillers in column 9, lines 1-63. Harada et al. relate polymerizable monomer, acylphosphine oxide, organic peroxide and tertiary amine in the Abstract, camphorquinone, peroxide and amine in column 1, lines 53-59, a blend of peroxides, tertiary aromatic amines in column 9, lines 18-67 and column 10, lines 1-11. Fillers are mentioned in claim 8. Nippon Oil & Fats Co. teaches a blend of peroxides on page 8, lines 32-56, polyperoxy ester and diketone with monomers in claim 1. The University of California cites tertiary amine and peroxide in claim 1, polymerizable amines in claims 8 and 9 and monomers in claim 14. Kuraray shows polymerizable tertiary amine with alpha-diketone initiator and olefinic monomer. Since the cited references have the same compositions as the materials claimed in applicants' claims, it is reasonable to assume that they have the same properties and are capable to the same feats. In other words, all properties are inherent in the composition. The burden is shifted to applicants to prove otherwise. Applicants' claims are not novel.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 1-8, 10-12, 17-35, 37-41 and 43-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juchum et al. 5,583,164, in view of Bowen et al. 3,374,085, Erickson et al. 3,928,280, Argentar 4,243,763, Antonucci 4,536,523, Bowen 5,320,886, Eichmiller 5,525,647, Okada et al. 5,698,611, Kawashima et al. 5,908,879, Harada et al. 6,191,191, Nippon Oil & Fats EP 0 176 777, University of California WO 95/30480 or Kuraray Co. Ltd.

13. Juchum et al. discuss applicants' method in Example 3. Peroxides and amines are listed in column 4, lines 55-65. Photoinitiators, monomers and fillers can be found in columns 3-5. The secondary references have been discussed already in paragraph

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9. Although Juchum et al. refer to a setting phase within 4-10 minutes after mixing; the phrase "within 4-10 minutes" is equivalent to "from 1 second to 4-10 minutes".

Furthermore, even if it never occurred to Juchum et al. to test the cure after 3 minutes, since the composition of Juchum et al. is not different from applicants' claimed composition, the curing characteristics must be the same too. Accordingly, at best, applicants have discovered a new property of a known composition, which is not patentable. It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to see the compositions of the secondary references, while using the method of Juchum et al., since they are all describing compositions which are customarily used in dental applications.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is (571) 272-1124. The examiner can normally be reached on 7:00 a.m.-5:30 p.m. Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Peter Szekely  
Primary Examiner  
Art Unit 1714

P.S.  
8/12/04